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00:00:00,110 --> 00:00:03,799

The plan to put humans on the Moon by 2024

...

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00:00:03,799 --> 00:00:07,570

Wrapping up a series of spacewalks on the space station ...

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00:00:07,570 --> 00:00:12,620

And an historic first look at a black hole ... a few of the stories to tell you about

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00:00:12,620 --> 00:00:15,499

– This Week at NASA!

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00:00:15,499 --> 00:00:21,240

During his keynote address April 9 at the 35th Space Symposium in Colorado, our administrator,

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00:00:21,240 --> 00:00:26,590

Jim Bridenstine, discussed how NASA plans to put humans on the Moon within the next

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00:00:26,590 --> 00:00:27,590

five years.

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00:00:27,590 --> 00:00:29,670

“The first phase is speed.

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00:00:29,670 --> 00:00:33,350

Those things that we were going to invest in, in 2025, 2026, 2027 – we’re going

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00:00:33,350 --> 00:00:35,020

to move them up.

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00:00:35,020 --> 00:00:40,640

We need to get EM-1 off the ground in 2020 – that’s going to be a test of an uncrewed

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00:00:40,640 --> 00:00:44,620
Orion crew capsule with the European Service
Module around the Moon.”

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00:00:44,620 --> 00:00:49,989
Following that and a successful EM-2 flight
test with a crew, we’ll need the power,

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00:00:49,989 --> 00:00:53,940
propulsion and habitation that the Gateway
will provide in lunar orbit.

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00:00:53,940 --> 00:00:59,200
“The Gateway is our ability to go the Moon
fast, for sure.

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00:00:59,200 --> 00:01:04,600
Because of the power and propulsion element
of the Gateway we have more access to more

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00:01:04,600 --> 00:01:06,470
parts of the Moon than ever before.”

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00:01:06,470 --> 00:01:11,880
Which will also give us access to vital resources
needed to live and work on the Moon for extended

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00:01:11,880 --> 00:01:12,900
periods of time.

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00:01:12,900 --> 00:01:14,820
“Why is that so important?

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00:01:14,820 --> 00:01:15,990
The Moon is a proving ground.

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00:01:15,990 --> 00:01:20,610
It’s the best place for us to live and work

on another world so that we can ultimately

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00:01:20,610 --> 00:01:21,890

go to Mars.

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00:01:21,890 --> 00:01:29,440

Know this: the new direction of putting humans on the Moon in 2024, is not an America alone

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00:01:29,440 --> 00:01:30,610

effort.

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00:01:30,610 --> 00:01:33,200

We need all of our international partners.

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00:01:33,200 --> 00:01:36,760

Our agency is up for it.”

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00:01:36,760 --> 00:01:41,880

On April 8, our Anne McClain and David Saint-Jacques of the Canadian Space Agency, conducted a

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00:01:41,880 --> 00:01:46,450

six-and-a-half-hour spacewalk outside the International Space Station – the third

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00:01:46,450 --> 00:01:49,340

spacewalk in just under a month on the station.

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00:01:49,340 --> 00:01:54,880

The pair completed work to provide backup power to the Canadarm2 robotic arm, expand

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00:01:54,880 --> 00:02:00,229

wireless communications coverage, enhance computer network capability, and prepare the

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00:02:00,229 --> 00:02:04,720

station for future battery upgrade operations.

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00:02:04,720 --> 00:02:09,369
A black hole and its shadow have been captured
in an image for the first time.

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00:02:09,369 --> 00:02:14,040
It was captured by a massive network of radio
telescopes around the world – known as the

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00:02:14,040 --> 00:02:20,450
Event Horizon Telescope, or EHT – that works
together as one very large instrument.

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00:02:20,450 --> 00:02:26,120
The image shows the supermassive black hole
at the center of the elliptical galaxy M87

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00:02:26,120 --> 00:02:29,180
– about 55 million light years away from
us.

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00:02:29,180 --> 00:02:34,280
Several NASA spacecraft also observed the
black hole, and though they did not directly

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00:02:34,280 --> 00:02:41,090
trace out the historic image, data from those
observations were used to complement the EHT

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00:02:41,090 --> 00:02:42,790
findings.

42
00:02:42,790 --> 00:02:48,300
Results from our landmark Twins Study, which
took place from 2015-2016, were published

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00:02:48,300 --> 00:02:50,599
April 11 in Science.

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00:02:50,599 --> 00:02:55,730

Retired astronauts and twins Mark and Scott Kelly participated in the investigation during

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00:02:55,730 --> 00:03:00,650

Scott's final spaceflight – a nearly year-long mission aboard the International Space Station

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00:03:00,650 --> 00:03:02,980

– while his brother was on Earth.

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00:03:02,980 --> 00:03:07,810

Key results from the study will help better understand how to maintain crew health during

48

00:03:07,810 --> 00:03:10,840

human exploration to the Moon and Mars.

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00:03:10,840 --> 00:03:17,200

For more information visit: nasa.gov/twins-study.

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00:03:17,200 --> 00:03:22,920

The U.S. Astronaut Hall of Fame inducted its two newest members during an April 6 ceremony

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00:03:22,920 --> 00:03:26,129

at the Kennedy Space Center Visitor Complex in Florida.

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00:03:26,129 --> 00:03:30,830

Janet Kavandi, currently director of our Glenn Research Center, is a veteran of three space

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00:03:30,830 --> 00:03:35,090

shuttle missions and has logged more than 33 days in space.

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00:03:35,090 --> 00:03:39,790

James Buchli has four space flights to his credit during which he traveled more than

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00:03:39,790 --> 00:03:41,010

7 million miles.

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00:03:41,010 --> 00:03:48,780

He also served as deputy chief of the Astronaut Office from March 1989 until May 1992.

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00:03:48,780 --> 00:03:53,470

These inductions bring the total number of hall of fame space explorers to 99.

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00:03:53,470 --> 00:03:57,319

That's what's up this week @NASA ...